## CLAIMS

WHAT IS CLAIMED IS:

1. A system for visualizing, from topology data, a multi-layer topology schematic including a plurality of view levels, said system comprising:

visualization control means; and

partial domain management units prepared for each of a plurality of partial domains defined in said topology schematic,

wherein each of said partial domain management units includes predefined components to be displayed within the partial domain and a view level associated with each component, wherein said components are defined for at least two of said plurality of view levels within the partial domain,

further wherein in response to an input by which a partial domain and a requested view level to which the currently displayed schematic is to change have been selected, said visualization control means sets said requested view level in the partial domain management unit associated with said selected partial domain, and said system displays within said selected partial domain the component belonging to said requested view level as defined in said associated partial domain management unit.

2. The system recited in Claim 1, wherein each of said partial domain management units stores domain coordinate settings and domain size settings for each of said plurality of view levels, and said system displays the components of the selected partial domain and requested view level based on said domain coordinate settings and said domain size settings.

3. The system as recited in Claim 2, wherein said visualization control means compares the domain size settings of the current view level and the requested view level and automatically modifies the coordinates of other partial domains to be displayed, according to the results of said comparison.

4. The system as recited in Claim 3, wherein said modification includes shifting said other partial domains in the horizontal direction by an amount equal to the difference between the width of the new domain minus the width of the old domain.

5. The system as recited in Claim 3, wherein said modification includes shifting said other partial domains in the vertical direction by an amount equal to the difference between the height of the new domain minus the height of the old domain.

6. The system as recited in Claim 2, further comprising:

a means for storing the data of the relative coordinates at which a component is to be visualized within the partial domain and the component symbol figure for all components included in said multi-layer topology schematics.

7. The system as recited in Claim 6, wherein said system displays the symbol figure corresponding to the component on said requested view level in said selected partial domain in a position determined by said relative coordinates.

8. The system as recited in Claim 1, further comprising:

a components connection table in which component-to-component connections included in said multi-layer topology schematics are defined as discrete component-to-component links independent of the view level to which each component belongs.

9. The system as recited in Claim 8, wherein said visualization control means displays connection lines between a component displayed in response to said input and a component that is currently displayed and had also

been displayed before said input on the display screen in accordance with said components connection table.

10. The system as recited in Claim 1, further comprising:

an interlayer relation table in which distinct correspondence of a specific component on a view level to at least one component on another view level is defined.

11. The system as recited in Claim 10, wherein, when a new component is displayed in place of a previous component based on said input, and said new component and said previous component have a corresponding relationship in said interlayer relation table, said visualization control means displays said new component in a characteristic visual style.

12. The system as recited in Claim 10, wherein said characteristic visual style is selected from the group consisting of bold, a contrasting color, a different line thickness, a different line type, a different background color, a different background texture, blinking content, or a combination thereof.

13. A method for visualizing, from topology data, a multi-layer topology schematic including a plurality of view levels, said method to be used on a terminal device connected to a server via a network, said method comprising the steps of:

receiving multi-layer topology data wherein components or component-to-component connections may be different for each of said view levels;

creating a partial domain view level table in which components to be displayed within each level of the partial domain and the view levels of the components are defined for all partial domains set in accordance with the arrangement of components in the topology schematic;

displaying on the screen of the terminal an initial topology schematic on an initial view level in accordance with said multi-layer topology data; and

in response to user input by which a partial domain and a requested view level to which the currently displayed schematic is to change have been selected, determining which component(s) belong to said requested view level from the partial domain view level table for the selected partial domain and changing the display of said selected partial domain to that of the determined component(s).

14. The method as recited in claim 13, wherein the multi-layer topology data received from said server

includes predefined domain coordinate settings and domain size settings for each of said partial domains in each of said plurality of view levels,

and wherein in response to said user input, said terminal device displays the component on the requested view level based on said domain coordinate settings and said domain size settings.

15. The method as recited in claim 13, wherein said terminal device compares said domain size settings before and after view level change and automatically modifies the coordinates of other partial domains to be displayed on the schematic, according to the results of said comparison.

16. The method as recited in claim 14, wherein the multi-layer topology data received from said server includes predefined relative coordinates at which a component is to be displayed within the partial domain and a predefined component symbol figure for each component, and said terminal device displays the symbol figure corresponding to the component on said requested view level in a position determined by said relative coordinates within said view domain.

17. The method as recited in claim 13, wherein said terminal device creates a components connection

table in which component-to-component connections included in multi-layer topology schematics are defined as discrete component-to-component links independent of the view level to which each component belongs, according to the multi-layer topology data received from said server.

18. The method as recited in claim 13, wherein said terminal device creates an interlayer relation table in which distinct correspondence of a specific component on a view level to at least one component on another view level is defined, according to the multi-layer topology data received from said server.

19. A computer-executable program for performing a visualization process comprising:

the step of generating a plurality of view instances, each in which the identifier of a component, coordinates where the component is to be displayed on the schematic, and the component symbol figure are defined from given topology definition data;

the step of generating partial domain instances for all partial domains set in topology schematic space from said topology definition data, each domain instance controlling the components to be displayed in the domain per view level;

the step of generating a connection table in which component-to-component connections are defined from said topology definition data;

the step of identifying initial components for a predefined initial level specified by referring to said partial domain instances and displaying the symbol figures of the components on the display screen in accordance with the definitions of the view instances corresponding to the identified components; and

the step of displaying connection lines between the displayed components in accordance with said connection table.

20.. The program according to claim 19, further comprising the step of:

in response to an external input identifying a selected partial domain and a requested view level to which the current view layer is to change, identifying component(s) by referring to the partial domain instance for said selected partial domain and displaying the symbol figure(s) of the components(s) in accordance with the definition(s) of the view instance(s) for the identified component(s).